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ABSTRACT

This report is intended to provide current information and integrated analysis of state-level higher education policy developments. Part 1 considers state funding support in the following categories: changing rules, effects of changing rules, survival in a changing game, and the growth industry of higher education. Part 2 examines issues concerned with college costs, including the existence of an affordability crisis, internal cost factors for colleges and universities, external cost factors for colleges and universities, impact on students and the federal role, strategies for cost containment, and real issues such as who should pay for public higher education and what are the responsibilities of higher education's stakeholders regarding affordability. Part 3 examines issues related to students, including the changing American college student; challenges of change; and policy implications, such as accountability reporting and performance-based funding and budgeting. Data are presented in 20 tables and charts. A list of related Internet resources is attached. (DB)

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State Issues Digest

American Association of State
Colleges and Universities

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and compiled by Travis Reindl, Policy Analyst,
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Contents

Foreword 5

State Funding Support–Have the Rules Changed? 7
- Are the Rules Really Changing? 7
- Changing Rules, Tougher Game 8
- Surviving and Thriving in a Changing Game 14
- A Mature Industry? 16

College Costs–What Are the Real Issues? 19
- An Affordability Crisis? 19
- Internal Cost Factors for Colleges and Universities 19
- External Cost Factors for Colleges and Universities 23
- Impact on Students/The Federal Role 24
- Strategies for Cost Containment 26
- Focusing on the Real Issues 28

Who Are Our Students? What is Happening to Them? How Does It Matter? 31
- The Changing American College Student 31
- The Challenges of Change 33
- Policy Implications 41
- Raising the Stakes 42

Internet Resources 44

State Funding Support—Have the Rules Changed?

Figures

Figure 1. States with "Super-Majority" Taxing Provisions, 1997 8
Figure 2. State Term Limits, October 1997 9
Figure 3. States with Performance Funding and Budgeting, 1997 10
Figure 4. States Expecting Adoption of Performance-Based Funding Within 5 Years, 1996 11

Charts

Chart 1. State Budget Balances as a Percentage of Total Expenditures, FY80–FY97 15
Chart 2. State General Fund Expenditures, By Category, FY87–FY96 15

College Costs—What Are the Real Issues?

Tables

Table 1. Institutional Funding Mechanisms for Technology Updating and Replacement, 1996 21
Table 2. Change in Tuition Factor, By State, FY80–FY96 25

Charts

Chart 1. Institutional Aid at AASCU and Public Four-Year Institutions 22
Chart 2. Tuition as a Percentage of Appropriations Plus Tuition (tuition factor), FY80–FY96 24
Chart 3. Average vs. Inflation-Projected Appropriations and Net 26
Chart 4. Average Pell Grant Award as a Portion of Tuition and Fees
Room and Board (Four-Year Public Non-Doctoral institutions) 27
Chart 5. Average Title IV Loan Debt, Undergraduate Degrees
Completed in 1995-96, by Total Income 27

Who Are Our Students? What is Happening to Them? How Does It Matter?

Tables

Table 1. Undergraduate Students, by Nontraditional Status
and Institutional Type (Fall 1986–Fall 1995) 32
Table 2. Retention/Graduation Data Using JCAR Conventions 37
Table 3. Student Advancement Data Using JCAR Conventions 38
Table 4. Percentage of Oklahoma Residents Receiving Bachelor's
Degrees Employed or Enrolled In-State, August 1997 39
Table 5. Field of Study for 1991-92 Bachelor's Degree Recipients
(public and private institutions) Compared to the Standard Industrial
Classification of Employment, August 1997 40

Charts

Chart 1. Percentage of Undergraduates Enrolled Part-Time, Fall 1991 and Fall 1995 33
Chart 2. Percentage of Undergraduates 25 or Older, Fall 1991 and Fall 1995 33

Foreword

Dear AASCU Members:

We are pleased to present you the first edition of *AASCU's State Issues Digest*. In an age where legislation moves across state lines at the speed of fax and e-mail, this document has been designed to provide you with up-to-date information and integrated analysis of state-level higher education policy developments. It is an integral part of AASCU's continuing efforts to assist you as you discuss state policy issues with key internal and external constituencies.

We hope that you will find the *Digest* useful, and that you will call on AASCU's staff whenever you need information or other assistance.

Sincerely,

Ed M. Elliott
President
Central Missouri State University
and AASCU Chair

James B. Appleberry
President
American Association of State
Colleges and Universities

State Funding Support—Have the Rules Changed?

Are the Rules Really Changing?

In state capitals around the nation, a new year brings activity associated with the drop of the legislative gavel. In some states, the legislative session is an intense sprint that is measured in days. In others, it is more like a marathon, requiring a measured and sustained pace over the course of several months. In all states, it is a time during which public colleges and universities occupy both the hot seat and center stage, when coalitions unite to make deals and factions emerge to break them, and a time when campuses must again contend for their share of state resources.

Public colleges and universities have enjoyed a good deal of success in their quest for funding over the past couple of years, with state appropriations increasing in nearly all states and rising by double-digit percentages in some. Even states such as New York, which had a relatively bleak fiscal record for higher education earlier in 1997, have seen their financial outlook improve markedly in recent months.[1] On the surface, it would appear that colleges and universities are just having a series of "up" years in the up-and-down cycles of state funding support.

There is increasing evidence, though, that the "rules of the game" for attracting state investment are changing, and changing faster than we might think. Clark Kerr alluded to this notion several years ago in a speech entitled "Higher Education: Doing So Well, Feeling So Bad." In that speech, Kerr argued that beneath a veneer of general satisfaction with higher education's accomplishments lie fundamental differences between campuses and their external publics that have resulted in calls for greater accountability and considerable academic and administrative change.[2]

How do we know that what campuses are experiencing now is a period of lasting change and not just another swing of the pendulum or a series of passing fads that will disappear with the personalities or conditions promoting them? The confluence of several developments, which are presented in the following pages, strongly suggest that we are witnessing an evolution, rather than a hiccup, in the state funding process.

Several recent statements support this idea. One comes from the National Governors' Association, which made the following statement in releasing data showing the strongest state fiscal conditions in nearly 20 years:

> *"Faced with the unprecedented challenge of a shift of responsibility from the federal government to the states and a shared national goal of achieving a balanced budget, governors are embracing the guiding principles of efficiency, austerity, and improved management in developing state budgets."*[3]

The Pew Higher Education Roundtable put it even more bluntly for colleges and universities:

> *"Only a naive idealism could hope for a full scale return to the era of broad public finance for higher education that the [California] Master Plan and the Carnegie Commission helped to create."*[4]

In what ways are the rules of the game changing? How are public colleges and universities coming to terms with these changes?

Changing Rules, Tougher Game

A number of forces inside and outside the statehouse are combining to change the environment surrounding higher education appropriations. Forces within the statehouse include a shifting fiscal outlook by governors and legislators and increased competition for funding among public services. Forces outside the capital include taxpayer activism and the growing influence of private enterprise. These forces leave college and university leaders with the feeling that they are engaged in an endless game of "catch-up."

External Forces

Political Landscape

Recent years have been marked by a resurgence of populism, as voters feel the need to place additional checks on the taxing and spending powers of government. The roots of this movement can be traced back to post-Watergate fallout and California's passage of Proposition 13 in 1978, and has been seen more recently in the Republicans' 1994 takeover of Congress and their Contract with America. Even as the rhetoric of contracts and revolutions fades from the headlines, this grassroots activism continues at the state level and will probably have a significant impact on higher education finance in the years ahead.

"Pocketbook Populism." Voters in many states—convinced that their taxes are too high, their government spends too much, or both—are marching to the polls to place additional restrictions on states' revenue-raising and spending abilities. These measures will effectively limit the menu of funding options available to governors and legislators, thereby limiting options for funding higher education.

Voter Approval of Tax Changes/Increases. Voters in a small but growing number of states have given themselves direct authority in the initiation of new taxes and the increase of existing ones. Within past five years, three states—Colorado, Missouri and Washington—have elected to submit tax increases directly to the voters for approval; Oregon voters considered but rejected a similar measure in a 1996 vote.

"Super-Majority" Requirements for Tax Changes/Increases. Thirteen states currently require that a "super-majority" of legislators (ranging from 60 percent to 75 percent of the members-elect) approve new taxes or increases in existing ones. *(See Figure 1)* More than half of those states have instituted or modified these limits within the past five years, spurred on by a proposal to require a three-fifths majority in Congress for increasing federal taxes.

Several states took action on this issue in the 1996 general election. Voters in Nevada approved a constitutional amendment requiring a two-thirds vote of legislators to approve measures which generate or increase any "tax, fee assessment, rate, or any other form of public revenue." In South Dakota, voters decided (with a 74 percent majority) to extend their "super-majority" pro-

Figure 1. States with "Super-Majority" Taxing Provisions, 1997

■ States with "super-majority" provisions (13)
□ States without "super-majority" provisions (37)

Source: National Conference of State Legislatures, "State Tax and Expenditure Limits."

vision to include the imposition of new taxes. Florida voters overwhelmingly approved a hybrid type of "super-majority" provision, where constitutional amendments imposing new state taxes or fees must now be approved by a two-thirds majority of the voters themselves.[6] The continuing debate over the federal tax system and the success of state measures in 1996 indicate that this movement will likely continue through 1998 and beyond.

Term Limits: Using the Law to "Throw the Bums Out."

A read of *The Federalist Papers* reveals that the question of how long elected leaders should serve in office is one that has confronted our nation since its founding. Over the past several years, however, growing disenchantment with incumbency advantage and career politicians has given rise to measures that rely on state statutes and constitutions to limit terms, rather than using the ballot box.

Figure 2. State Term Limits, October 1997

■ Lifetime Limits (7)
Consecutive Limits (12)
No Limits (31)

Source: National Conference of State Legislatures, "Term Limits for State Elected Officials."

There are two basic types of term limits at the state level: *consecutive limits*, which limit the number of terms that a legislator or state official can serve without interruption, and *lifetime limits*, which limit the total number of years that a person can serve in any given office. Twenty-one states adopted term limits between 1990 and 1995, with 12 states adopting consecutive limits and seven states adopting lifetime limits (two states–Nebraska and Massachusetts–have thrown out their limits).[7] *(See Figure 2)* The battle over term limits for state officials has moved into the judicial arena, as California's lifetime limits were recently overturned by a federal appeals court *(Bates v. Jones)*.* This raises the prospect that the U.S. Supreme Court will take up the issue of state term limits (at least lifetime limits) in the near future.[8]

Controversies aside, the impact of term limits is being felt in statehouses nationwide. In 1998, nearly 10 percent of all legislators in states with term limits (258) will be ineligible for re-election. Particularly hard-hit will be Arkansas (half of its 100-member House of Representatives), Michigan (60 percent of its 110-member House), Washington (one-third of its 98-member House), and Oregon (one-third of its 60-member House). In 2000, eight more legislative chambers will be term-limited, and a number of incumbent legislators in affected states are choosing to leave before their time is up.[9]

What do term limits mean for campuses and systems as they attempt to make their way through the appropriations process and other legislative issues? Such limits mean that working relationships between presidents/chancellors and legislators, as well as legislative coalitions on higher education issues, will have to be built more quickly and more frequently. A 1995 survey by the National Education Association (NEA) found that 54 percent of education committee chairs in state legislatures were serving in their first term as chair, and that 25 percent had been in the legislature five years or less.[10] As the full impact of term limits is felt in the next several years, these figures will likely rise.

* Term limits on federal legislators were ruled unconstitutional by the U.S. Supreme Court in *U.S. Term Limits, Inc. v. Thornton* (1995).

Performance Funding and the "Corporatization" of Higher Education

"Higher education should be run more like a business." "If I ran my plant the way the colleges in this state are run, I wouldn't have a plant." "Colleges and universities need to look at their students more as customers." Whether one agrees with the above statements or not, they illustrate the growing influence of private enterprise and market philosophies on higher education policymaking.

One aspect of this influence is the dramatic success of for-profit entities like the University of Phoenix, which has seen enrollment skyrocket from a handful of students in 1978 to more than 40,000 today. The university, which is accredited by the North Central Association of Colleges and Schools, offers associate, bachelor's and master's degrees for working adults at campuses and learning centers in 12 states and Puerto Rico. The university is also engaged in expansion efforts, and recently helped to persuade the Pennsylvania legislature to lift its ban on for-profit universities.[11] Non-accredited corporate higher education programs are also proliferating, spurred on by the success of such ventures at giants like Microsoft.

This influence is increasingly finding its way into policymakers' vocabulary and higher education proposals. This is particularly evident in the growth of performance-based funding and budgeting programs for state colleges and universities. Higher education planning experts point out that performance funding represents a fundamental shift from an input-driven funding model premised on the state meeting the institution's needs to an output-driven funding model where the focus is on the institution meeting the state's needs. One expert describes the business affinities of these programs, writing: "Performance funding systems emphasize results, processes, customer service, quality, and productivity."[12]

The use of performance measures in allocating state funds to colleges and universities dates back to the 1970s, when states such as Hawaii, Tennessee and Washington experimented with the concept.* Several more states showed interest in performance funding programs in the 1980s as part of the Total Quality Management (TQM) movement, but most abandoned their efforts with the onset of recession and tight budgets in the early 1990s.[13] Interest in the idea has been revived, however, and 10 states currently have programs that directly link a portion of state higher education appropriations to selected performance indicators *(performance funding)*,** and 11 other states use performance measures in the budgetary process in some indirect manner *(performance budgeting)*.[14] *(See Figure 3.)* For states that directly link funding to performance measures, the portion of total appropriations allocated using the measures is small, averaging 2-3 percent. Moreover, the funds are typically discretionary and awarded in addition to the institution's base funding. South

Figure 3. States with Performance Funding and Budgeting, 1997

Both (1)

Performance Budgeting (7)

Performance Funding (9)

Neither (33)

Source: Burke/Serban, *Performance Funding and Budgeting for Public Higher Education: Current Status and Future Prospects*.

* Tennessee has the oldest currently operating performance funding system, implemented in 1979.

**Arkansas had a performance funding program, but discontinued it during its 1997 legislative session.

Carolina's program is a dramatic exception to this rule—it will allocate 100 percent of its higher education funds using performance measures by Fiscal Year 2000.[13]

Though the present scope of performance funding is relatively small, its presence is almost sure to increase in the immediate future. Burke and Serban's 1996 survey of state higher education finance officers found that 45 percent of states not currently using performance funding see its adoption as "likely" or "highly likely" within the next five years.[14] *(See Figure 4)* Similarly, 44 percent of the education committee chairs in the NEA survey indicated that links to student and/or institutional performance would be a likely funding strategy for their state within three to five years. The NEA study also revealed that 45 percent of those surveyed predicted a change in the higher education funding formula toward performance-based components, while 52 percent saw increased linkage to "identified statewide priorities" as a likely funding strategy.[15] One of the clearest illustrations of this sentiment comes from a report recently released by the Citizens' Commission on the Future of Oklahoma Higher Education:

> *"A larger share of the budget for institutions should involve performance and incentive funding, while a smaller share should be treated through the Regents' normal allocation procedures. Performance and incentive funding policies can be used for economic development, for academic planning resource allocation, for high priority activities, and for achieving standards of performance."*[16]

Figure 4. States Expecting Adoption of Performance-Based Funding Within 5 Years, 1996

■ Highly Likely (7)
▨ Likely (10)
□ Currently Has/Has Not See Adoption as Likely (33)

Source: Burke/Serban, *Performance Funding and Budgeting for Public Higher Education: Current Status and Future Prospects*

For states that are seriously considering or have recently adopted performance-based funding programs, the following observations from other states may be helpful:

- **Identifying the Purpose.** What are the primary objectives of a performance-based funding approach? External accountability, institutional improvement, or both? A clear understanding of the objectives is important for selecting appropriate criteria.

- **Selecting Indicators.** The composition of the group charged with selecting the performance indicators is extremely important, and there should be a cross-section of interests represented (policymakers, business, higher education). In their research of performance funding systems, Burke and Serban found that policymakers generally favor retention/graduation rates as a primary measure, while faculty representatives were more partial to measures of alumni/employer satisfaction. In many cases, the indicators are determined largely by the availability of data.

- **One Size Does Not Fit All.** Performance funding programs need to be tailored to account for the state's policymaking culture and particular educational needs. This also holds true at the intra-state level—criteria appropriate for a research university may not be appropriate for a comprehensive university, and vice versa.

- **The Challenge of Setting the Bar.** Even where there is consensus regarding performance indicators, determining appropriate success criteria is a difficult balancing act. Those responsible for setting the criteria must be careful not to set expectations that cannot be met, and at the same time must avoid artificially low benchmarks. Open and honest communication during this stage of the process is critical, as institutions have a natural hesitation to present images of themselves that are less than ideal.

- **Political Dynamics.** Maintaining continuity and stability in performance-based funding programs can be a challenge as political currents change and advocates and opponents come and go. This factor should be taken into account in designing a program.

- **Performance Funds and the Budget Base.** The question of whether or not performance funds received by institutions should become part of their permanent base for the next budget cycle has been a contentious one in some states. Policymakers and institutions must be aware of this potential stumbling block at the outset.

Internal Forces

Fiscal Restraint

The sustained strength of state and national economic conditions has exceeded the expectations of many analysts, including those in state budget offices. For Fiscal Year 1997, 47 states expect final revenue collection figures to top initial estimates, and about a quarter of those states look for collections beyond their most optimistic projections.[19] The National Governors' Association statement, however, indicates that states are reacting to this bounty with caution rather than bold new spending initiatives. This restraint can be attributed to structural and situational forces:

Structural. More than half of all states (27) have either constitutional or statutory limits on the growth of tax revenues or expenditures/appropriations. Most (20 states) limit the growth of appropriations linking them to the prior year's appropriations, inflation, or rate of income growth in the state. Nearly all of the states with these measures have adopted them since 1978 and about one-third of them have emerged within the last five years. As revenues outpace (and in some cases far exceed) expectations, several states are reaching their limits, triggering provisions which require that excess revenues be refunded to taxpayers or placed in state reserves. States currently encountering this include Colorado, Oregon, Washington and Missouri.[20] These provisions limit the extent to which higher education and other public services can receive one-time funding for special projects or to make up for earlier cuts.

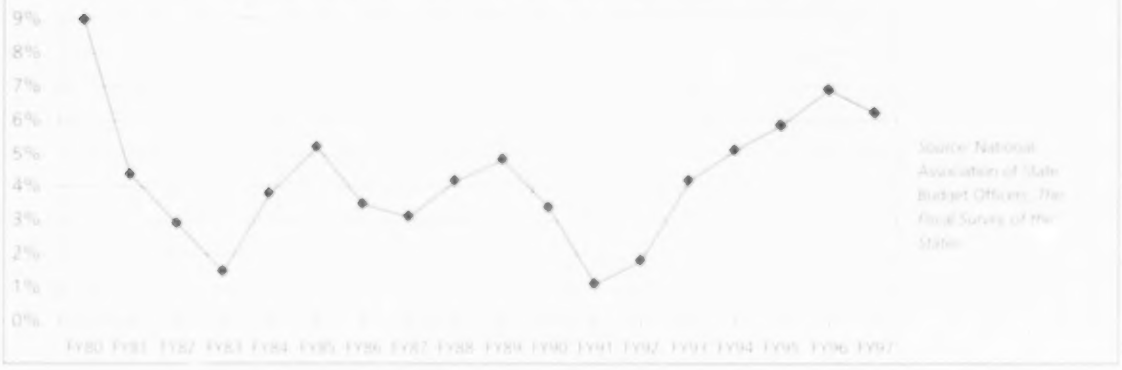
Situational. Because the economy has shown such unexpected staying power, some of those crafting state budgets feel that they are living on borrowed time, and that a recession lurks somewhere in the near future. Policy developments at the federal level also play a role, as the implementation of welfare reform and ongoing struggles over shared programs such as Medicaid and highways prompt states to hedge their fiscal bets. The combination of these factors has discouraged most states from making significant new and/or long-term outlays, and has instead focused attention on one-time projects such as infrastructure repair and debt service, and especially the accumulation of budget reserves.[21] Overall, these reserves are currently estimated at $24.2 billion, or just over 6 percent of total state expenditures–their second-highest level since Fiscal Year 1980.[22] *(See Chart 1)*

Budgetary Competition

Higher education's priority on states' fiscal agendas has slipped over the past decade, and those setting the agendas are not optimistic that this trend will reverse itself in the immediate future.

Funding Effort. One gauge of state fiscal emphasis on higher education is the measurement of appropriations for colleges and universities relative to tax revenues collected, controlling for changes in enrollment and population. Referred to as *funding effort*, this indicator represents the ratio of state and local higher education appropriations per full-time equivalent student to total state revenue collected per capita, adjusted for inflation. Nationally, state and local funding effort for public colleges and universities fell 26 percent between Fiscal Year 1987 and Fiscal Year 1996. Only two states reported positive change in their funding effort over this period–Wyoming (7 percent) and Texas (0.5 percent). The remainder of the states posted declines ranging from 2 percent in Wisconsin to 50 percent in New Hampshire.[23]

Chart 1. State Budget Balances as a Percentage of Total Expenditures, FY80–FY97



Source: National Association of State Budget Officers, *The Fiscal Survey of the States*

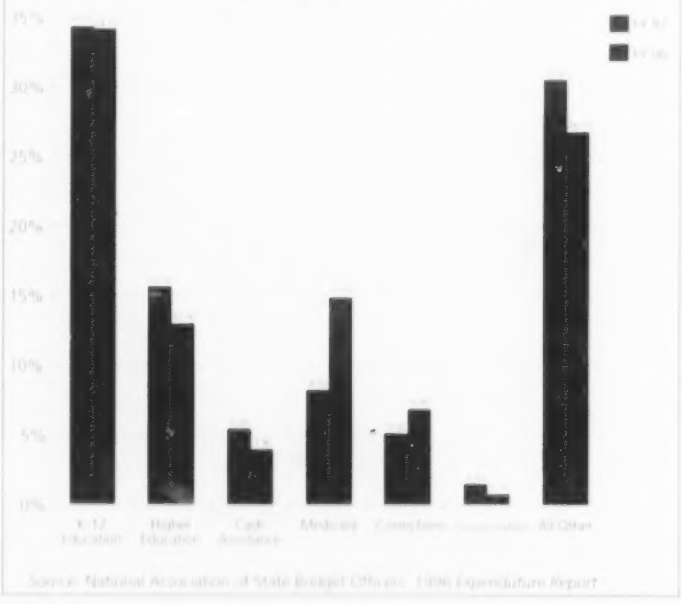
Budget Share. State spending on higher education as a portion of total general fund spending has fallen significantly in recent years, from 15.5 percent in Fiscal Year 1987 to 12.9 percent in Fiscal Year 1996. At the same time, the portion of general funds claimed by elementary and secondary education remained stable (34.2 percent in FY87, compared with 34.1 percent in FY96). Medicaid, which replaced higher education in FY93 as the second-largest single recipient of general funds, dramatically increased its claim on the general fund from 8.1 percent in FY87 to 11.8 percent in FY96. Corrections saw a more modest increase in its general fund share, moving from 5 percent in FY87 to 6.8 percent in FY96.[2] *(See Chart 2)*

Perhaps more troubling for colleges and universities are legislators' predictions about these trends. A majority of the education committee chairs surveyed by the NEA in 1995 predicted that the share of general funds dedicated to higher education will remain level or decline in the foreseeable future. The legislators did, however, express the hope that the total general funds budget will continue to grow, which would mean increased appropriations but not increased priority for higher education.[3]

New Competitors. The data above indicate that the competition for state investment has become much tougher for colleges and universities. But what is driving this competition? One factor is the emergence of relatively new contenders for funding, which include:

- *Tax Cuts.* Revenue windfalls, combined with the existence of revenue or expenditure limitations, are prompting states to cut tax rates to the tune of an estimated $4.4 billion in FY98. While overall revenue collection continues to climb even after accounting

Chart 2. State General Fund Expenditures, By Category, FY87–FY96



Source: National Association of State Budget Officers, *1996 Expenditure Report*

for the reductions, aggressive tax cutting has squeezed higher education in some states. An example of this is New York, where a two-year $2 billion cut in personal income tax rates left the state struggling to balance its books. The effect of this challenge was not lost on its colleges and universities—state appropriations to higher education fell 10 percent between FY95 and FY97.[26]

- *Shift from Property Taxes.* The property tax has a long history as the principal target of taxpayer anger, and many states are engaged in a continuing search for alternatives to it. Michigan's drastic reduction of property tax rates in 1994 led to a spate of proposals to completely abandon local property taxes, and while none of those proposals were successful, several states have since trimmed their property tax burdens. Wisconsin provides an example of how a shift away from property taxes can have an impact on funding efforts for higher education. In 1995, the state's legislature determined that two-thirds of the state's K–12 funding load would come from the general fund, banking on economic growth and spending restraint to cover the impact of such a shift ($1.2 billion). During the biennium that this took effect, appropriations for the state's colleges and universities fell one percent.[27]

Existing Competitors. Legislative and judicial developments continue to have an impact on higher education's traditional competitors for state funding:

- *Elementary and Secondary Education.* Litigation regarding the adequacy and equity of state aid to local school districts continues to dominate the national landscape, as nearly half of all states are at various stages of the judicial process with respect to their K–12 funding mechanisms. Several states, such as Ohio, are facing the prospect of hefty spending to formulate and implement systems that pass legal muster, while a number of states not currently involved in litigation are revising their formulas and boosting spending to avoid costly suits.[28]

- *Medicaid.* Although a lot of attention has been focused on corrections as a competitor for state funds, Medicaid has emerged as one of the biggest fiscal challenges for states in the last decade. Spending increases at the state level have slowed over the past couple of years, but forecasts of annual increases for 1996–2002 (7.7 percent per year from the Congressional Budget Office and 7.5 percent per year from the Office of Management and Budget and the Urban Institute) will likely exceed a number of states' estimates of their future spending.[29] Moreover, the implementation of expanded eligibility for poor children under 18, the aging of the "baby boomers,"* and renewed inflation in health care costs will place upward pressure on spending in the near future.

- *Corrections.* Law and order issues remain at the top of the public agenda, even as overall crime rates continue to fall. This manifests itself in a continued "get tough on crime" policy approach, with increasing corrections spending and prison populations as its products. Nearly half the states supplying prison population data to a recent study expected faster growth in 1997 than in 1996.[30]

Surviving and Thriving in a Changing Game

What do these changes mean for public colleges and universities? They underscore the need to recognize higher education's place in a changing fiscal environment, and the need to adopt strategies that recognize and make the most of it.

Understanding the Context

A look at higher education's competitors suggests that factors outside the statehouse are increasingly having an impact on state budget decisions. While

* Elderly care is one of the most costly types on a per patient basis.

policymakers are aware of lagging faculty salaries and accumulating deferred maintenance, they are simultaneously being forced to contend with federal mandates related to welfare or Medicaid, as well as court-ordered changes in elementary and secondary funding. The effects of this can be seen in 42 "state of the state" addresses delivered by the nation's governors in 1997, only one-quarter of which featured higher education as a priority–nearly all spotlighted K-12 education and two-thirds named public safety as a top concern.[31]

This struggle for priority is due in large part to the fact that higher education, for better or worse, affords governors and legislators an element of flexibility in the budgeting process. Spending on public colleges and universities constitutes the largest single discretionary spending item, one that is not subject to federal match requirements or funding formulas defined in state statute or court mandates. Moreover, public higher education depends on non-governmental sources–namely student tuition and private gifts and grants–for a significant portion of its revenue, sources that can usually be tapped to backfill shortfalls from other revenue sources. The combination of these factors makes higher education the "balance wheel" of state finances, receiving disproportionate cuts to balance tight budgets and significant–but not compensatory–increases when revenues improve. Higher education's struggle for priority in appropriations committees and on the public agenda will continue and even intensify as long as there is an emphasis on devolution in Washington, an overriding concern over law and order, and a fight over financing public schools in the courts.

Because of this crowding at the statehouse level, it is becoming increasingly important for public colleges and universities to raise awareness of their role and contributions at the grassroots level, where state policymakers get their marching orders. A growing area of focus for campus state relations offices is the development of new strategies to inform and engage John Q. Public regarding higher education issues. Again, findings of the Citizens' Commission on the Future of Oklahoma Higher Education illustrate this trend:

> *"The State Regents need to conduct a major public information effort to explain the services Oklahoma Higher Education offers to Oklahoma and Oklahomans and the benefits the state and its citizens receive from those services."*[32]

This task is both necessary and challenging for the simple reason that higher education is not part of the lived experience of most Americans, particularly those from the pre-"baby boom" generations. Less than half of all Americans 25 and older (48 percent) have received at least some college education; among Americans 50 and older, only 38 percent have had at least some college.[33] Connecting with these constituencies is essential for raising awareness of and support for state colleges and universities.

Part of this task involves making the products of higher education relevant to the daily lives of average citizens. Pointing out that state colleges and universities produce the teachers that educate our children, the doctors who care for us, and the materials that make our roads and bridges safer is one way to do this.

Another portion of the task entails placing a greater emphasis on higher education as a public good–something that benefits more than just the economic prospects of students able to participate. Public benefits must be made concrete, particularly for those more indirectly impacted by higher education. These include:

- *Improved Civic Life.* Research has shown that participation in higher education is correlated with greater civic participation (charitable giving, volunteerism, voting).
- *Tax Contributions/Reduced Welfare Participation.* College graduates and attendees have significantly lower participation rates in social welfare programs and contribute a substantial portion of state and local tax revenues.
- *Economic Development.* Colleges and universities themselves are a source of economic development

(purchases by universities, faculty, staff, and students provide a return to the state of several dollars in tax revenue for every dollar invested via appropriations). Several methods exist for measuring and presenting this.

Institutional Strategies

Public colleges and universities nationwide are mapping out and implementing strategies that recognize the changing fiscal landscape and seek to make the most of those changes. Following are two accounts from AASCU members:

Portland State University (Oregon). Several years ago, Portland State faced the resource challenges of rollbacks in state aid and a state funding formula that gave short shrift to its enrollment base as an urban university (part-time, nontraditional students). At the same time, retention and completion rates were slipping, with no additional state funds available for needed curriculum reform or special programs to combat the problems. The university addressed both internally, embarking on a multi-million dollar budget reallocation plan that freed resources needed to create a four-part general education program called University Studies, which features experiential learning through community service. Since implementation of the program, retention rates have risen and are expected to improve further as the program reaches a larger portion of the student body. Applications for admission have also increased among traditional students, which will improve the university's formula funding prospects. Portland State was recognized for its innovations as one of three recipients of the 1996 Pew Leadership Award for the Renewal of Undergraduate Education.[3]

Clayton College and State University (Georgia). As a relatively young institution serving a primarily nontraditional student body, Clayton State recently set a goal of more fully using information technologies to improve learning resources, career readiness, and student services while reducing reliance on state funding for these technologies. To meet this goal, the university has launched a three-part Information Technology Project (ITP) in collaboration with Floyd College, a nearby public two-year institution. One component of the ITP, the Universal Personal Information Technology Access (U PITA) program, seeks to provide each student with a notebook computer and Internet access. By ensuring universal access to current technology, U PITA will enable the institutions to integrate these technologies into curriculum, particularly in the "real world" applications relevant to their students' needs. A second component, known as LINX, provides students, faculty, and staff with a universal identification/debit card that gives the user access to a wide range of on- and off-campus facilities and services (including banking, student financial aid, and telecommunications). The third component involves the movement of U PITA and LINX to self-sustaining status as auxiliary services within three years. To meet this objective, the ITP is drawing on a unique combination of funding sources, including:

- Proceeds from campus retail sales
- Commissions on other sales involving the LINX card/transaction revenues (e.g. banking, telecommunications, utilities)
- Grants from vendors competing for the notebook computer bid
- Revenues from continuing education provided to individuals and corporations
- Student technology fees

The project, approved by the University System of Georgia's Board of Regents in March 1997, is currently being implemented, with transition to self-supporting status to be completed by August 2001.[4]

A Mature Industry?

As state legislatures convene again, many will likely take their cues from strong economic conditions and provide another fiscal year of solid increases for higher education. This may prompt some observers to dismiss

the preceding analysis as "doom and gloom" hand-wringing. But the previously presented data and arguments show that whether revenues are strong or weak, whether appropriations are up or down, there is a growing sense of limitation—both in terms of state investment and institutional mission—for public higher education. This idea is neatly captured by long-time observer Arthur Levine in his characterization of higher education as a mature industry, one that is currently encountering the same growing pains as those faced by the health care industry in recent years. Levine writes:

> *"In a growth industry, higher education could almost count on additional resources annually, or had only to identify small additions to the old. Today and in the future, with resources stable or declining, change must occur by substitution. If something new is added, something old must be eliminated.*
>
> *The common wisdom is that higher education must do more with less, now and in the future. The reality is that institutions will have to do less with less."*[1]

Portland State and Clayton State are just two examples of institutions adjusting to the changing realities of funding public higher education—there are scores of others across the nation. As the presidents of these two institutions or any college or university undertaking major change can tell you, the road to innovation and redefinition is one filled with complaints by some that change is happening too fast and criticism by others that it isn't happening fast enough. But if the rules of the game are in fact changing and higher education is evolving into a mature industry, creative and significant change in institutional game plans will become less of an option and more of a necessity.

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College Costs—What Are the Real Issues?

An Affordability Crisis?

Americans are currently confronted by horror stories of runaway prices at their colleges and universities and of students and families finding the doors to higher education abruptly closed to them.

Americans sense an "affordability crisis" in higher education, as depicted in the media with headlines like "Gouging U" on the cover of *Time* and "$1,000 a Week" on the cover of *Newsweek*. Stories like these have spurred a national discussion of college costs and what to do about them, with concerned conversations around kitchen tables to the halls of Congress. A national commission has even been formed to explore the issue, and one of its members recently indicated that some policymakers may be ready for federal action on cost containment:

> *"In my view, the commission's most important task is to make specific recommendations regarding innovative methods of reducing and stabilizing tuition."*

Treating college costs as a widespread crisis is inaccurate. The problem of economic access to higher education is not as widespread as depicted, yet is a problem for some. A "crisis" accounting fosters misunderstanding and miscommunication and distracts from the basic issues, which are that:

- Colleges and universities have limited control over a good share of their costs and institutions are increasing their efforts to trim expenses in areas where they do have latitude.
- Support for public higher education is a responsibility shared by students and their families and state governments. In recent years, the balance of that responsibility has shifted toward students to compensate for the lost purchasing power of state appropriations.
- Federal policy is affecting how students deal with these costs. The slipping purchasing power of grant aid and the continuing shift in emphasis from grants to loans is increasing the burden on students, particularly for those on the lowest rungs of the economic ladder. On the institutional side, there is no credible evidence to suggest that the availability of federal aid provides colleges and universities with an incentive to raise their prices.

It is a combination of these factors, and no single one of them, that is driving college cost concerns. The higher education community needs to face these concerns squarely, starting with clear communication with policymakers and the public. Areas for improvement need to be admitted, areas of innovation and progress highlighted, and the idea of shared responsibility constantly emphasized.

Internal Cost Factors for Colleges and Universities

The cost of providing higher education, as in any service industry, depends to a great extent on the cost of goods and services necessary to perform the service.

Colleges and universities are unique among state institutions because of the wide variety of goods and services–from furnace filters and aluminum foil to mainframe computers and electron microscopes–that they must purchase for their routine operations. Changes in the cost of these items have a marked impact on an institution's total cost per student. Moreover, colleges and universities must frequently change their purchasing patterns to reflect the changing demands of students and other stakeholders. Taken together, these factors are a significant force driving college costs.

Internal cost pressures for public colleges and universities can be divided into three major types:

Rising Cost of Inputs. The price of goods and services purchased by colleges and universities has increased substantially in recent years, in many cases well above the rate of inflation. Institutions are stretching their dollars to the extent possible, but are increasingly losing purchasing power.

Instructional Materials. The cost of instructional staples such as laboratory and library supplies has soared over the last decade. As a result, subscriptions are being cut, collection growth has slowed, and equipment replacement cycles are being stretched to their limits.

According to Research Associates of Washington, the library acquisitions component of the Higher Education Price Index (HEPI) increased 52.9 percent between Fiscal Year 1992 and Fiscal Year 1997 (an average annual increase of 6.6 percent, roughly double the rate of the Consumer Price Index) and 93.8 percent between Fiscal Year 1987 and Fiscal Year 1997. This means that colleges and universities are paying nearly double what they were just 10 years ago for the same "market basket" of library materials.[2]

Similarly, a survey conducted by the Association of Research Libraries found that their members had purchased 7 percent fewer serials between 1986 and 1996 but had spent 100 percent more for serials because of rising subscription costs.[3]

Personnel Costs. Higher education is a human resource intensive enterprise, so changes in labor costs have a pronounced impact on an institution's bottom line. One of the most significant cost increases on this front has been in the cost of fringe benefits, which are now equivalent to 24 percent of the average faculty salary at public institutions.[4] In an effort to minimize these costs, colleges and universities are increasingly filling vacancies with part-time and adjunct appointments, for which fringe benefits are commonly not provided. This has caused friction with faculty unions and is causing many new faculty members to take part-time assignments at multiple institutions.

The fringe benefits component of the HEPI increased 65 percent between Fiscal Year 1987 and Fiscal Year 1997. This means that the price of a fixed quantity of fringe benefits has increased 65 percent over a 10-year period. By comparison, the overall HEPI increased 47 percent over this period, while the CPI posted a gain of only 43 percent.[5]

Unfortunately, health care inflation appears to be headed for steeper increases in the near future. The National Coalition on Health Care recently released a report projecting that spending on health care will far outpace inflation over the next five years, as new federal legislation regarding portability and non-discrimination in health insurance takes effect and as managed care providers raise rates to recoup profits lost during their bidding war for market share.[6]

Changes in Consumption Patterns/ Consumer Demands

As a popular commercial used to say, "This is not your father's Oldsmobile." A number of developments, especially the information technology revolution, are affect-

ing purchasing patterns and costs for colleges and universities.

Technology

As computing and telecommunications technologies are integrated into administrative and academic activities throughout the campus, institutions are scrambling to fund initial investments in infrastructure and keep pace with shrinking obsolescence cycles. Comparing the 1990 and 1996 findings of the annual *Campus Computing* survey provides a glimpse at the magnitude of this change for public colleges and universities:

- In 1990, public four-year colleges owned an average of 611 desktop computers. By 1996, that number had increased 122 percent to 1,358 computers.[7]

- The average number of campus computer labs, clusters and classrooms maintained by public four-year colleges jumped from 28 in 1990 to 52 in 1996, an increase of 86 percent.[8]

- While the technology infrastructure of campuses has changed dramatically over the past five years, funding mechanisms for technology have not. *Campus Computing 1995* found that "Budgeting models at most campuses do not allow institutions to plan for the routine replacement of technology resources; instead, the majority of institutions continue to 'find' one-time money rather than reserve funds to replace aging equipment."[9] In 1990, only 15.7 percent of public four-year colleges reported having a fiscal plan in place to address technology life cycle issues; by 1996, that portion had only increased to 22.2 percent. A similar trend can be seen for all institutions, where 15.9 percent reported having an "acquire and retire" financial plan in 1990, increasing to just 28.1 percent by 1996.[10] *(See Table 1)*

Student fees have become an increasingly popular funding source for needed improvements in computing, as *Campus Computing 1995* points out: "Public institutions are turning to mandatory user fees to help underwrite technology costs and provide equipment for campus labs and public clusters."[11]

A 1997 study by the State Higher Education Executive Officers (SHEEO) found that eight states* currently have state-level guidelines or policies dealing with technology fees at four-year institutions, and that public four-year institutions in 39 states are authorized to charge technology fees. The study also found that while rates vary considerably from state to state, the application of the fees is being limited to hardware, software and infrastructure purchases.[12] In an effort to increase student access and minimize infrastructure costs, a number of institutions–including several WASCU members–have implemented initiatives whereby students are required to lease or purchase a computer.

*Georgia, Iowa, North Carolina, North Dakota, Oklahoma, Oregon, Washington and Wisconsin.

Table 1. Institutional Funding Mechanisms for Technology Updating and Replacement, 1996

(percentage of institutions responding)

	One-Time Allocation		Developing Plan		Have Plan	
	1990	1996	1990	1996	1990	1996
Public Four-Year Colleges	56.3%	39.8%	29.4%	38.0%	13.7%	22.2%
All Institutions	49.1%	32.1%	32.8%	39.8%	15.9%	28.1%

Sources: Campus Computing 1990; Campus Computing 1996

A majority of public four-year colleges surveyed by *Campus Computing 1996* (61.9 percent) indicated that they currently have or are planning to institute a computer use fee for all students, compared with 39.5 percent of all institutions and just 28.3 percent of private four-year colleges. Moreover, public four-year colleges reported placing a greater emphasis on student computing fees as part of their strategic planning in 1996 than in 1990.[13]

Another cost pressure related to computing is the "year-2000 problem," which refers to the inability of most computer systems to properly recognize dates ending in "00." Colleges and universities are facing hefty bills to fix this problem, either by rewriting tens of thousands of lines of computer code or purchasing entirely new systems. Purdue University, which recently received an award from the National Association of College and University Business Officers (NACUBO) for its economical "year-2000 problem" fix, has so far spent $450,000 on its efforts.[14]

Institutional Aid

Aid to students has become one of the fastest-growing areas of spending at public colleges and universities, as institutions use need- and merit-based awards to attract students and meet financial need not covered by federal student aid. Spending on institutional aid increased 60 percent in inflation-adjusted dollars between 1989-90 and 1994-95 at AASCU institutions, and 62 percent over the same period at all public four-year institutions.[15] *(See Chart 1)*

Consumer Demands

Institutional efforts to attract and retain students can also be costly. Colleges and universities are finding increasingly discriminating consumers in prospective students, who are demanding a broader range of amenities to meet their needs.

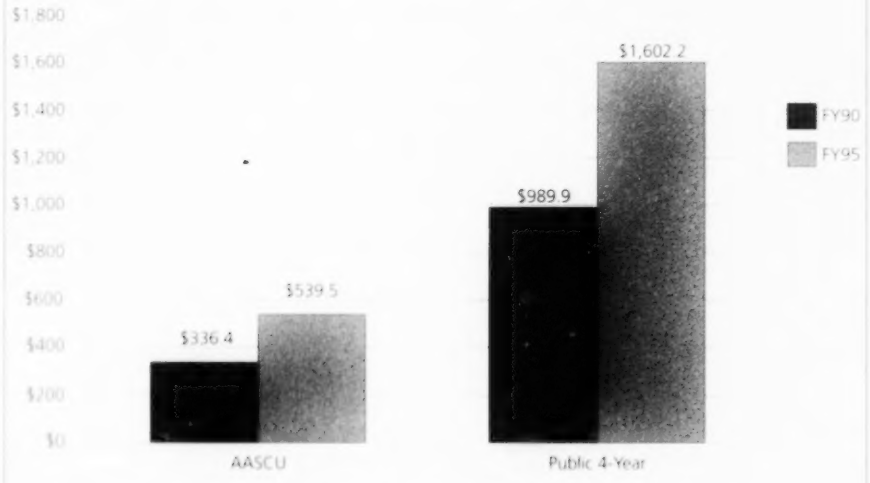
For the past four years, USA Group Noel-Levitz has conducted a survey of student satisfaction at colleges and universities nationwide. Between 1994-95 and 1996-97, the gap between student priority and student satisfaction grew the most at public four-year institutions in the areas of campus life (26 percent) and campus support services (17.5 percent).[16]

Regulatory Compliance

Public colleges and universities are subject to a wide range of state and federal regulations, covering everything from the handling of hazardous materials to employee leave to student aid. While these policies are intended to ensure access to facilities and services and to improve the safety and well-being of students, faculty and staff, they come with a price tag. The cost of regulatory compliance is a concern for many institutions, and one that is often not recognized in their budget requests.

Chart 1. Institutional Aid* at AASCU and Public Four-Year Institutions

(constant FY95 dollars)



*Includes institutional matching funds for federal, state, and local governments programs.
Source: NCES, Integrated Postsecondary Education Data System (IPEDS), Finance Survey

According to a 1995 study conducted by The Association of Higher Education Facilities Officers (APPA), the National Association of College and University Business Officers (NACUBO), and Sallie Mae, the average estimated cost of compliance with the Americans with Disabilities Act (ADA) was $1.4 million for public four-year colleges, $8.3 million for public research universities, and $1.3 million for all higher education institutions.[17]

Public colleges and universities face greater scrutiny with respect to regulatory standards. The APPA/NACUBO/Sallie Mae study also found that public four-year colleges are nearly three times as likely as their private counterparts to be named in an ADA-related complaint or lawsuit, and more than four times as likely to be named in an ADA investigation or enforcement action.[18]

External Cost Factors for Colleges and Universities

Pricing decisions in public higher education are subject to state policy considerations as well as market pressures. Tuition levels at most state colleges and universities are determined by a number of factors outside the campus, and are significantly influenced by the level of state appropriations. The following points illustrate that trends in state appropriations have shifted the balance of responsibility for funding public higher education decidedly toward students, and that there is a strong relationship between the level of public investment and the tuition charged.

Tuition-Setting Authority

The current anxiety over college costs has focused a great deal of attention on the rate at which the price of tuition has increased at colleges and universities, but has largely ignored the fact that many of these institutions have a limited–if any–role in actually setting their prices. Public colleges and universities have sole authority to set tuition and fees in just nine states and shared authority in eight more, meaning that public institutions have direct authority over the tuition rates they charge in only one-third of the states. In the remaining two-thirds of the states, tuition-setting authority is vested in a governing/coordinating board or the legislature.[19]

A number of factors enter into tuition-setting decisions, either directly or indirectly. According to SHEEO, the factors most frequently used for direct linkage to tuition rates are prior year's tuition (18 states), followed by cost of instruction (12 states) and state general fund appropriations (10 states). Among factors considered indirectly, the most used are other student fees or charges and tuition at peer institutions (31 states each), followed by cost of instruction and state general fund appropriations (27 states each). It is worth noting that the cost of instruction is directly linked to tuition-setting in only about a quarter of the states, and indirectly linked in only about half of all states.[20]

State/Student Funding Balance

State appropriations and student tuition form the core of operating revenue for public colleges and universities. The relative share of funding from each source varies from state to state, but in recent years the balance of responsibility across the states has shifted toward students.

In Fiscal Year 1980, tuition as a percentage of tuition plus state and local appropriations (referred to as the tuition factor) stood at 20.9 percent nationally, and had only increased to 23.2 percent by Fiscal Year 1986. By Fiscal Year 1996, however, that share had increased to 31.6 percent. Only one state (Nevada) saw a decrease in tuition factor between Fiscal Year 1980 and Fiscal Year 1996.[21] *(See Chart 2 and Table 2)*

Similarly, data from the National Center for Education Statistics indicate that tuition and fee revenues made up 27.7 percent of education and general revenues at public four-year baccalaureate institutions in 1990-91, a share that had increased to 33.5 percent by 1994-95.[22]

Tuition and the Lost Purchasing Power of State Appropriations

Recent increases in state appropriations for higher education have caused critics to question the relationship between changes in state funding and tuition increases. However, taking a short-term view overlooks the severity of funding cuts in the early 1990s, ignores the fact that the cost of doing business in higher education has outpaced the rate of inflation and the growth of appropriations in recent years, and fails to account for changes in enrollment. Over the past decade and a half, the purchasing power of state and local appropriations for public colleges and universities has eroded, and tuition increases have picked up the slack.

In Fiscal Year 1996, state and local appropriations per full-time equivalent (FTE) student in public higher education institutions were $4,801–$765 per FTE student behind where they would be had they been increased annually by the Higher Education Price Index (HEPI) since 1980. In other words, state and local appropriations for public higher education are $765 per full-time equivalent student below where they would be if they had been adjusted annually for colleges' and universities' "cost of living."[3]

By contrast, tuition per FTE student in FY96 stood at $2,219–just $718 per FTE student ahead of where it would be had it been increased by HEPI since Fiscal Year 1980. In other words, tuition is currently $718 per full-time equivalent student above where it would be had it been adjusted annually.[4] *(See Chart 3.)*

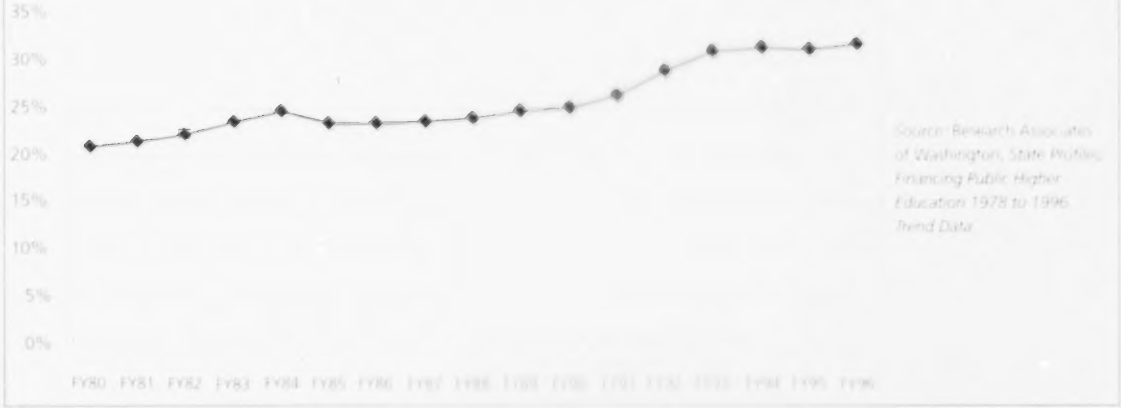
This means that the rise in tuition at public institutions over the past decade and a half has basically been a dollar-for-dollar match, reflecting the lost purchasing power of state appropriations–hardly a case of "Gouging I."

Impact on Students/The Federal Role

The impact of rising costs on students and their families brings the role of the federal government into the discussion, and centers around two primary questions:

- *What have recent developments in federal financial aid policy meant for student efforts to finance a college degree?* Unfortunately, rising tuition and current trends in federal student aid are saddling students with a growing debt burden. The coverage of these trends has focused on the squeeze felt by middle class families, but the data suggest that more disturbing trends have developed regarding students on the lowest rungs of the economic ladder.

Chart 2. Tuition as a Percentage of Appropriations Plus Tuition (tuition factor), FY80–FY96



Source: Research Associates of Washington, State Profiles: Financing Public Higher Education 1978 to 1996 Trend Data

Table 2. Change in Tuition Factor,* By State, FY80–FY 96

	FY80	FY96	Change
Alabama	26.7%	37.4%	10.7%
Alaska	9.4%	19.9%	10.5%
Arizona	21.3%	31.3%	10.0%
Arkansas	23.5%	32.6%	9.1%
California	7.5%	18.4%	10.9%
Colorado	36.6%	47.3%	10.7%
Connecticut	21.4%	31.0%	9.6%
Delaware	37.9%	55.7%	17.8%
District of Columbia	5.3%	15.7%	10.4%
Florida	21.1%	23.5%	2.4%
Georgia	18.2%	23.7%	5.5%
Hawaii	8.5%	12.1%	3.6%
Idaho	14.4%	17.8%	3.4%
Illinois	16.4%	19.9%	3.5%
Indiana	27.6%	40.7%	13.1%
Iowa	24.5%	33.9%	9.4%
Kansas	23.2%	30.2%	7.0%
Kentucky	20.6%	36.6%	16.0%
Louisiana	18.5%	42.9%	24.4%
Maine	32.1%	36.5%	4.4%
Maryland	26.4%	37.6%	11.2%
Massachusetts	22.8%	34.4%	11.6%
Michigan	29.7%	43.0%	13.3%
Minnesota	18.4%	29.5%	11.1%
Mississippi	25.8%	31.3%	5.5%
Missouri	22.0%	39.9%	17.9%
Montana	20.8%	40.3%	19.5%
Nebraska	22.3%	28.1%	5.8%
Nevada	19.0%	17.3%	-1.7%
New Hampshire	54.3%	67.0%	12.7%
New Jersey	19.9%	30.7%	10.8%
New Mexico	16.1%	18.3%	2.2%
New York	19.6%	32.7%	13.1%
North Carolina	16.5%	20.2%	3.7%
North Dakota	22.6%	34.6%	12.0%
Ohio	32.8%	43.0%	10.2%
Oklahoma	19.8%	30.2%	10.4%
Oregon	24.8%	40.8%	16.0%
Pennsylvania	32.0%	46.7%	14.7%
Rhode Island	23.4%	45.9%	22.5%
South Carolina	19.4%	41.8%	22.4%
South Dakota	27.4%	41.2%	13.8%
Tennessee	22.5%	29.5%	7.0%
Texas	18.6%	26.9%	8.3%
Utah	19.9%	27.9%	8.0%
Vermont	62.3%	78.3%	16.0%
Virginia	24.1%	44.8%	20.7%
Washington	20.3%	26.3%	6.0%
West Virginia	19.0%	44.8%	25.8%
Wisconsin	26.3%	29.1%	2.8%
Wyoming	14.0%	21.2%	7.2%
U.S.	20.9%	31.6%	10.7%

* Tuition factor refers to tuition as a percentage of tuition + state/local appropriations.

Source: Research Associates of Washington, *State Profiles: Financing Public Higher Education 1978 to 1996 Trend Data*

The portion of total student financial aid represented by grants has declined from a peak of 46.8 percent in 1993-94 to 36.4 percent in 1996-97, while the portion of loans in total aid has risen over the same period from 54.2 percent to 58.9 percent. This trend can be traced in large part to the 1992 reauthorization of the Higher Education Act. At that time, there was a significant expansion of loan programs (the advent of direct lending and unsubsidized Stafford loans) and the Pell Grant eligibility for independent and dependent students who work was curtailed. From 1992-93 to 1993-94, federal grant aid* decreased from $7.5 billion to $6.7 billion (-10 percent) in inflation-adjusted dollars. By contrast, federal loan aid** jumped from $17.4 billion to $23.7 billion (36 percent) over the same period.[25]

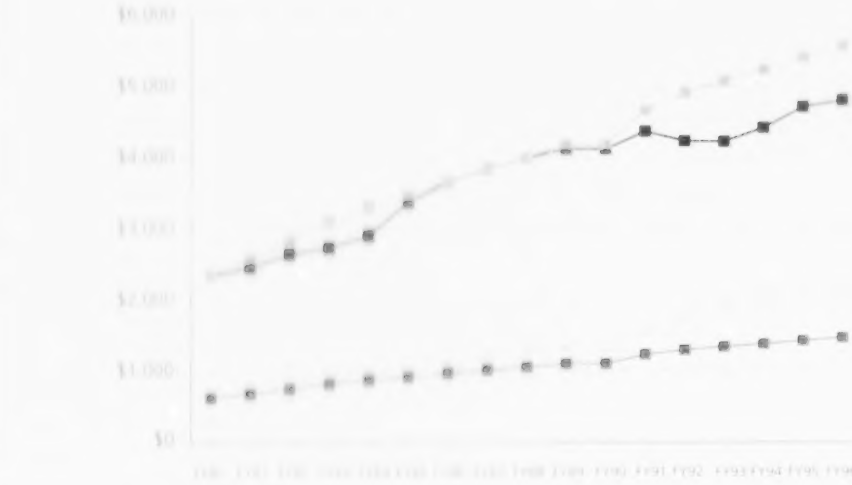
For students that do manage to receive grants, especially the Pell Grant, they are increasingly faced with the reality that these awards are covering a shrinking portion of total costs. In 1986, the average Pell Grant award covered 36.5 percent of tuition/fees and room/board at public four-year, non-doctoral colleges. In 1995, the average grant only covered 25.9 percent of the same charges. This is because grant awards have failed to keep pace with inflation and tuition increases accelerated in the early 1990s.[26] *(See Chart 4)*

With grants buying less and tuition rising, more and more students are being sent into the loan market—including those for whom borrowing was never intended. According to the National Postsecondary Student Aid Study (NPSAS), the percentage of undergraduates at public four-year institutions taking out loans to finance their education increased from 20.4 percent in fall 1989 to 36.5 percent in fall 1995. Moreover, NPSAS reveals that there is little or

*Includes Pell Grants, Supplemental Educational Opportunity Grants (SEOG), and State Student Incentive Grants (SSIG).

**Includes Stafford Loans (subsidized and unsubsidized), Perkins Loans, Supplemental Student Loans (SLS), and Parent Loans for Undergraduate Students (PLUS), and Income Contingent Loans.

Chart 3. Average vs. Inflation-Projected Appropriations and Net



	FY80	FY81	FY82	FY83	FY84	FY85	FY86	FY87	FY88	FY89	FY90	FY91	FY92	FY93	FY94	FY95	FY96
	$2,330	$2,453	$2,639	$2,779	$2,899	$3,368	$3,654	$3,837	$3,994	$4,118	$4,296	$4,364	$4,226	$4,219	$4,414	$4,708	$4,801
	$2,330	$2,161	$2,035	$2,101	$2,303	$2,461	$2,662	$2,845	$2,999	$3,175	$3,396	$3,660	$3,902	$3,979	$4,226	$4,404	$4,566
	$616	$673	$747	$836	$939	$1,023	$1,103	$1,170	$1,253	$1,337	$1,435	$1,546	$1,712	$1,886	$2,006	$2,117	$2,219
	$616	$677	$749	$870	$873	$915	$968	$1,017	$1,057	$1,104	$1,162	$1,232	$1,296	$1,343	$1,387	$1,429	$1,471

no difference in the average Title IV loan debt for bachelor's degree recipients from the lowest income categories and degree recipients in the highest income categories. In fact, the average debt for graduates with incomes of less than $10,000 is second highest among income categories at public four-year institutions and the highest among income categories at all institutions.[7] *(See Chart 5)*

- Have increases in federal financial aid for students provided an incentive for colleges and universities to raise their prices? This question has been the subject of a number of studies over the years, and the higher education provisions of the Taxpayer Relief Act of 1997 have again made it a topic of much speculation. A recent analysis by Coopers and Lybrand attempted to answer that question, finding that:

> *"McPherson and Shapiro's conclusion that federal assistance is unrelated to private college tuition still holds; such changes as have occurred—principally, sharp increases in student loans—have had practically no discernible impact on private four-year tuition charges. **Unlike McPherson and Shapiro, we were unable to detect any relationship at all between federal student aid and the tuition charged for public institutions*** [emphasis added]."[8]

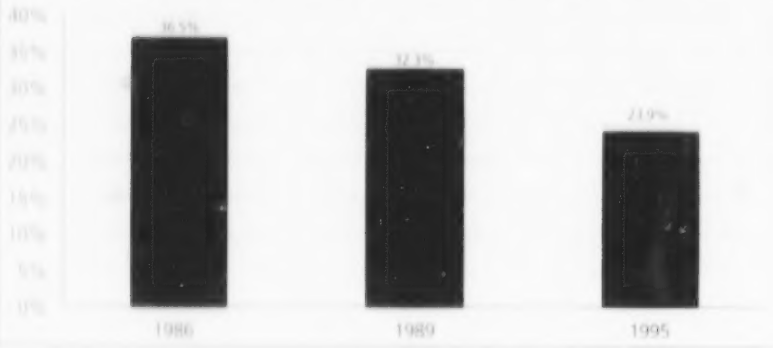
Strategies for Cost Containment

The primary role of colleges and universities in cost containment is good stewardship of available resources. While there is always room for improvement on this front, institutions are developing innovative approaches to trim their expenses and those of their students.

Policy Developments

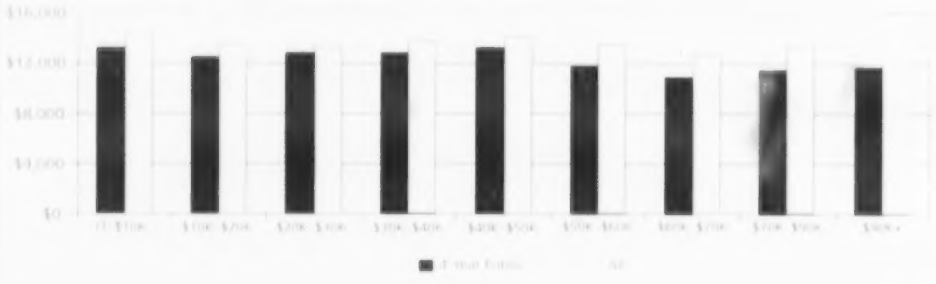
Campuses and systems are joining legislative and executive branch leaders in a number of states to increase

Chart 4. Average Pell Grant Award as a Portion of Tuition and Fees/ Room and Board (Four-Year Public Non-Doctoral Institutions)



Sources: NCES, National Postsecondary Student Aid Study (NPSAS) 1995-96; NCES, Digest of Education Statistics 1996

Chart 5. Average Title IV Loan Debt,* Undergraduate Degrees Completed in 1995-96, by Total Income**



Source: NCES, National Postsecondary Student Aid Study (NPSAS) 1995-96

*Includes PLUS.

**Reflects total income for independent and dependent students.

efficiency through changes in policy. Following are examples of these efforts:

Tuition/Appropriations Agreements. California's public universities entered a four-year compact with the state's governor in 1995-96 which holds that University of California and California State University systems are to receive average annual general fund appropriations increases of 4 percent and are allowed to increase student charges up to 10 percent.[9] On the expenditure side, UC and CSU agreed to serve an average of 1 percent annual enrollment growth and achieve $10 million in productivity savings each year. Similarly, in 1997 the University of Maine System reached a deal with the state's legislature that calls for the university system to hold tuition increases at or near the rate of inflation, based on the percentage increase in state appropriations.[10]

Regulatory/Purchasing Reform. A number of public college and university systems currently operate under state purchasing regulations that fail to account for higher education's unique purchasing needs or render institutions ineligible for educational discounts offered by many vendors. Many of these regulations act at cross-purposes with the goal of increasing administrative efficiency. Several states have granted institutions greater

[9] Because of strong revenue collections, the governor-legislature have "bought out" these increases with general fund appropriations.

flexibility in these areas in the past couple of years, and the university systems in North Dakota and South Dakota even proposed the creation of an interstate higher education purchasing cooperative to their respective legislatures; however, opposition by state agencies killed the measure in the South Dakota legislature's 1997 session.[30]

Tuition Differentials. Several university systems are attempting to stretch instructional funding support by requiring students to pay a tuition surcharge for courses taken beyond those required for their intended degree. Nine states currently have such surcharges in place and several more are considering them.[31]

Degree Partner Programs/Fast-Track Degree Programs. Developments in cost containment policy are not focused solely on institutions. A growing number of colleges and universities, such as Central Michigan University, are implementing tuition programs where the university guarantees that students in certain degree programs will be able to graduate in four years (if they remain enrolled full time and follow an advising program). If a student is not able to complete the degree within that period, the university will pay for the remaining courses required for completion.[32] Other institutions are implementing fast-track degree programs, where students in certain majors can complete a bachelor's degree in three years by following a prescribed curriculum.

Innovations in Operations and Business Practices

Campuses are also changing a number of their routine operations and practices to increase their cost-effectiveness, including:

- use of new technologies to streamline and automate administrative functions (e.g. student registration and employee reimbursement) and to increase energy conservation (replacement of aging heating/ventilation/air conditioning and electrical systems);
- privatization of certain auxiliary functions (particularly bookstores, physical plant maintenance, and groundskeeping);
- use of in-house expertise to provide certain services (e.g. staff training and intra-institutional seminars) rather than contracting with outside providers;
- establishment of cooperative arrangements with local K-12 school districts for facilities use;
- para-professionalization of the student workforce (e.g. filling temporary administrative positions with student workers);
- development of external partnerships in areas such as hazardous material handling and campus policing;
- elimination of low-enrolled majors, programs, and options;
- consolidation of administrative and academic units (e.g. merging of admissions/registrar/financial aid offices, consolidation of academic departments and colleges); and
- movement of campus centers and outreach projects to self-supporting status.[33]

Focusing on the Real Issues

The preceding analysis has attempted to clarify that the issues of containing costs and preserving affordability do not belong solely to students or to institutions—they belong to all of higher education's stakeholders. While these issues are more complex than current media accounts would indicate, they are rooted in very basic policy questions:

Who should pay for public higher education?

The trends in state appropriations and student aid previously outlined suggest an emerging view of higher education as a good that primarily benefits the student, and therefore should be financed primarily by the student. This shift in the balance of responsibility is a disturbing trend, one that should be the subject of continuing dialogue with policymakers at all levels.

What are the responsibilities of higher education's stakeholders with respect to maintaining affordability and minimizing costs?

Though it would seem to be a question with obvious answers, it is one that has been largely left out of the current college cost discussions.

- *The Institutional Role.* The campus responsibility is one of making the best possible use of available resources, as cited earlier. New technologies should be employed where practicable, external partnerships forged where possible, and consolidations and reductions made where necessary.

- *The State Role.* "The primary purpose of state appropriations is to keep student tuition as low as possible to guarantee easy access by all residents of the respective state. Low tuition is the most effective guarantee of access for all and is essential to a broadly educated citizenry." *(1997 TASCC Public Policy Agenda)*

- *The Federal Role.* "The primary function of federal financial aid is to guarantee access to higher education; this aid should be directed to the individual." *(1997 TASCC Public Policy Agenda)*

- *The Student/Family Role.* "Families should be encouraged and empowered to assume their share of, and save for, their children's higher education expenses." *(1997 TASCC Public Policy Agenda)*

The discussion of these questions should be marked by an open and frank exchange based on good information, rather than a rash of finger-pointing precipitated by flashy headlines. The higher education community has a significant role to play in setting the tone of that discussion, and needs to consider how to better address it.

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[7] Halstead (1996), op cit.

[8] Ibid.

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Who Are Our Students? What is Happening to Them? How Does It Matter?

The Changing American College Student

Take a walk around any state college or university today and on the surface things look about the same as they did five or 10 years ago. But a closer look reveals subtle but very definite changes. Classrooms are populated with a few more "baby boomers" and people toting briefcases as well as wearing backpacks. Students of all ages can be spotted hurrying from class to full-time jobs, and a few more of them can be seen with young children in tow. These relatively modest changes are significantly impacting our nation's system of higher education.

The increased presence of undergraduate students from outside the full-time, age 18-22 demographic is one of the key enrollment changes facing state colleges and universities today. While age and enrollment intensity (full time vs. part time) are the most commonly referenced characteristics of nontraditional status, the National Center for Education Statistics (NCES) defines nontraditional attendance as meeting at least one of seven criteria:

- delayed enrollment/age
- part-time enrollment
- financial independence (for student aid purposes)
- full-time employment
- has a spouse or other dependents
- single parent
- no high school diploma

This definition provides a more holistic view of students and their environment and recognizes that attendance patterns will likely continue to change, even as most states expect an influx of 18 to 22 year olds within the next several years as part of the "baby boom echo."

Using the above criteria, NCES classifies nontraditional students as *minimally nontraditional* (possesses one of the seven characteristics), *moderately nontraditional* (possesses two or three of the seven characteristics), or *highly nontraditional* (possesses four or more of the seven characteristics).[1] Of the seven nontraditional criteria listed above, the National Postsecondary Student Aid Study (NPSAS) has found that delayed enrollment/age, financial independence, part-time enrollment, and full-time employment are the most prevalent.[2]

Table 1 shows the shift toward nontraditional patterns of attendance at public and private institutions between fall 1986 and fall 1995. For all institutional types, the basic shift has been from traditional status to moderately nontraditional status. For public institutions and all institutions, the share of highly nontraditional institutions fell slightly over the period.[3]

A comparison of AASCU institutions to public and private four-year institutions further illustrates this trend. *(See Chart 1 and 2)* In particular, the proportion of undergraduate students 25 or older grew significantly in all categories between fall 1991 and fall 1995, with private four-year institutions surpassing public four-year

Table 1. Undergraduate Students, by Nontraditional Status and Institutional Type (Fall 1986–Fall 1995)

	Percentage of Students			
	1986	1989	1992	1995
All Institutions				
Traditional	35.4	31.4	30.4	26.5
Minimally Nontraditional	13.8	15.1	15.2	16.5
Moderately Nontraditional	24.8	27.5	31.1	33.3
Highly Nontraditional	26.0	25.9	23.4	23.7
Public Four-Year Institutions (doctoral)				
Traditional	52.7	49.1	50.8	45.9
Minimally Nontraditional	15.4	18.9	18.1	19.6
Moderately Nontraditional	20.3	22.3	22.4	25.4
Highly Nontraditional	11.7	9.7	8.7	9.2
Public Four-Year Institutions (non-doctoral)				
Traditional	42.1	39.2	36.9	34.0
Minimally Nontraditional	15.6	18.6	18.0	17.3
Moderately Nontraditional	23.3	25.6	28.1	31.4
Highly Nontraditional	19.0	16.6	17.0	17.2
Private Four-Year Institutions (doctoral)				
Traditional	64.2	59.4	60.0	54.3
Minimally Nontraditional	9.2	15.4	11.8	15.4
Moderately Nontraditional	13.3	15.7	17.6	20.0
Highly Nontraditional	13.3	9.5	10.6	10.3
Private Four-Year Institutions (non-doctoral)				
Traditional	54.4	50.0	45.9	44.9
Minimally Nontraditional	11.3	14.5	11.1	13.8
Moderately Nontraditional	15.3	18.0	22.0	24.3
Highly Nontraditional	18.9	17.6	21.1	17.0

Sources: U.S. Department of Education, National Center for Education Statistics, *Nontraditional Undergraduates: Trends in Enrollment from 1986 to 1992 and Persistence and Attainment Among 1989-90 Beginning Postsecondary Students* (97-578); U.S. Department of Education, National Center for Education Statistics, National Postsecondary Student Aid Study (NPSAS), 1995-96 (unpublished data from Data Analysis System).

institutions in their share of older undergraduate students.[3]

The data illustrate that the students arriving on VASCU campuses are older and have more on their plates than just tests, papers and labs. They bring with them diverse aspirations–career advancement or change, increased earning capacity, personal enrichment–and often have different needs and concerns than their more traditional counterparts. The reality of this is sinking in quickly for many colleges and universities, prompting them to re-think and re-shape a number of their services and how they are delivered.

At the same time, policymakers are placing more emphasis on academic productivity. Many legislators and governors simply do not feel that traditional accountability measures such as enrollment statistics and standardized test scores are adequate indicators of program efficiency and effectiveness. The measurement of programmatic and institutional quality is being emphatically shifted to student outcomes, particularly the retention, graduation and placement of students. For a growing number of state colleges and universities these measures are being linked to resource allocation.

A study of academic support for nontraditional students at Australian colleges and universities is a perfect example of this dual challenge and shows that it is not confined to American higher education:

> *"Recent changes to the student profile in higher education, and calls for improved graduation rates and better quality graduates, have caused consternation among academics. Greater access to higher education by nontraditional groups is supported both ideologically and pragmatically. However, the disparate needs of such a student population have led to concern about the capacities of institutions and individual staff and students to meet the simultaneous calls for accountability."*

How are America's public colleges and universities reconciling a changing student profile with changing de-

mands for performance measurement? More important, how might their efforts affect the amount of state resources received, either now or at some point in the future?

The Challenges of Change

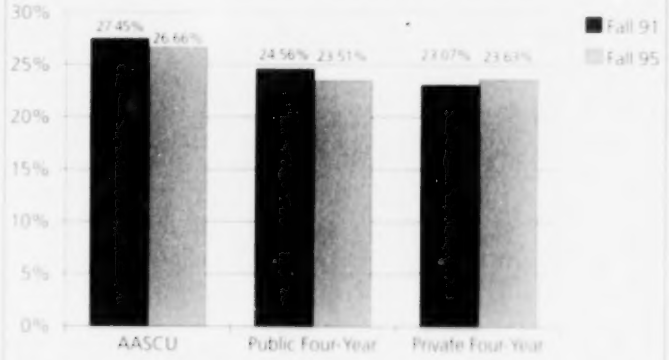
The challenges faced by institutions regarding student outcomes are both administrative and programmatic. The previously outlined demographic shifts have been toward characteristics that are traditionally associated with lower persistence and degree attainment rates, which increases the need for institutions to develop efficient and effective programs to improve these rates. At the same time, colleges and universities will likely have to revamp their existing data collection systems and develop new ones, particularly as federal and state governments require new information about the productivity of their academic programs.

Demographic Challenges

A number of factors determine whether or not a student will persist in their enrollment at an institution and ultimately obtain a degree. These factors are broadly classified as:

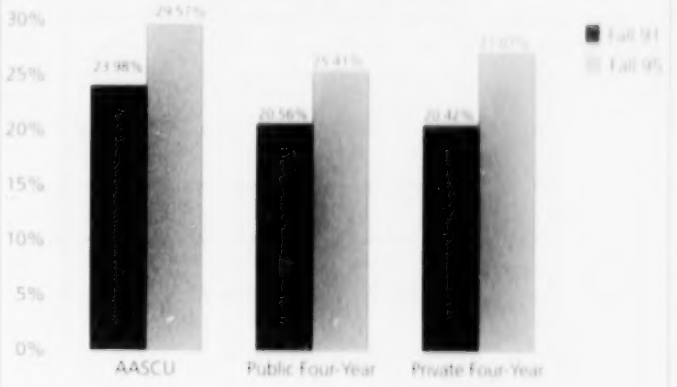
- *Student/ Academic*–factors related to the level and quality of the student's preparation for college-level work
- *Student/ Non–Academic*–factors related to a student's home/work/economic environment (employment intensity, number of dependents, receipt of student aid, etc.)
- *Institutional*–to the policies, practices and culture of a campus that serve to encourage or discourage persistence and attainment

Chart 1. Percentage of Undergraduates Enrolled Part-Time, Fall 1991 and Fall 1995



Sources: Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys (1991 and 1995)

Chart 2. Percentage of Undergraduates 25 or Older, Fall 1991 and Fall 1995



Sources: Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys (1991 and 1995)

Because it encompasses many of the characteristics associated with nontraditional attendance, the Student/ Non–Academic category has seen the most significant change over the past five years. Unfortunately, recent research has found an "obvious negative relationship" between nontraditional attendance patterns and persistence and attainment. While nontraditional students are equally as likely to stop out (i.e. leave the institution and return at a later point) during their postsecondary education as traditional students, they are far more likely to drop out (i.e. leave the institution

without returning). Moreover, the more nontraditional the student, the lower the likelihood of continued enrollment and graduation. Data from the 1994 follow-up of the NCES Beginning Postsecondary Student (BPS) study indicate that:

- 54.5 percent of all nontraditional undergraduates seeking a bachelor's degree had either received their degree or were still enrolled five years after their initial enrollment (1994), compared with 75.6 percent of traditional undergraduates.

- 64.9 percent of minimally nontraditional undergraduates seeking a bachelor's degree had received it or were still enrolled at the five-year point, compared with 42.5 percent of moderately nontraditional students and just 32.9 percent of highly non-traditional students.*

The BPS follow-up also reveals that students at public colleges and universities face greater challenges than their counterparts at private institutions in a number of respects:

- *Change in Risk Factors*–Among undergraduates attempting a bachelor's degree, 30.9 percent at public four-year institutions reported an increase in their number of persistence/attainment risk factors,* which is significantly higher than the 25.9 percent of undergraduates attempting bachelor's degrees at private four-year institutions.

- *Delayed Enrollment/Age*–Of those attempting bachelor's degrees at public four-year colleges and universities, 12.3 percent delayed enrollment (did not enroll by the October following high school graduation), which is slightly higher than the 10.3 percent reported for undergraduates at private four-year institutions.

- *Shift from Full Time to Part Time Enrollment*–11.4 percent of undergraduates working toward bachelor's degrees at public four-year institutions reported changing their enrollment status from full time to part time during their degree attempt, compared with just 7 percent at private four-year institutions.

- *Change in Dependency Status*–12.5 percent of undergraduates at public four-year colleges and universities indicated that their dependency status had changed from "dependent" to "independent" during their bachelor's degree attempt; at private four-year colleges and universities, only 8.4 percent of undergraduates reported such a change.

- *Full Time Employment*–Overall, the percentage of students employed while enrolled in postsecondary education has risen steadily over the past two decades. Among students attempting bachelor's degrees at public four-year institutions, 21.5 percent worked full time during their degree attempt, compared with 20.5 percent of those attempting bachelor's degrees at private four-year colleges and universities.

- *Financial Responsibility for Others*–21 percent of students seeking bachelor's degrees at public four-year institutions indicated having financial responsibility for someone other than themselves versus 17.2 percent of bachelor's degree seekers at private four-year institutions.

Programmatic Efforts

Given the increasing attention to academic productivity and the rise of demographic factors that make college attendance and degree attainment more difficult, many institutions look for strategies to bolster retention and completion rates. In their summary of the VASCE/Sallie Mae National Retention Project, Redd and Scott identified several institutional practices that were more prevalent at institutions with high six-year

*These basically correspond with the characteristics of nontraditional attendance (delayed enrollment, part time attendance, full time employment, financial independence, etc.).

graduation rates (56 percent or higher) than at institutions with lower rates:

- more aggressive tracking of student outcomes (both during the baccalaureate and post-baccalaureate periods);
- use of "early warning" systems to identify students at risk of stopping out or dropping out, and;
- aggressive monitoring of retention programs by campus leadership.[9]

Colleges and universities around the country are developing creative and successful approaches to increase retention and graduation of students—a private university in Missouri has even begun offering tuition rebates to students who attend full time without interruption and graduate in four years.[10] Following are examples of efforts at WASC institutions:

University of Central Florida. The university's leadership, recognizing the need for innovation in its retention programs, combined several small service offices to form a Unit of Academic Development and Retention in 1994. A focus for this unit is nontraditional students, as one-third of UCF's undergraduate population is made up of students 25 and older. The university has created a special Office of Evening and Weekend Student Services to better handle the needs of nontraditional students, and has made campus services more accessible to these students by having office hours that accommodate work schedules.

A second area of emphasis is first-year students and their transition into university life, as attrition in undergraduate enrollment most commonly occurs during or after a student's first year. The university's efforts include a pilot project called Class Advantage, which provides a select group of students with the opportunity to receive advising and set course schedules for their first term before they graduate from high school. Other programs include phone outreach to all incoming freshmen to answer questions and provide information, and individual advising sessions for incoming students during summer orientation.

The university has shown significant improvement in retention over the past several years. Its six-year graduation rate, as reported to the WASC/Sallie Mae National Retention Project (NRP), has increased steadily, from 46.9 percent in 1993 to 54.9 percent in 1996. This rate of change places UCF within the top quarter of all institutions supplying data to the NRP for each of its four years.[11]

Ball State University (Ind.). Retention has been a topic of interest for Indiana's policymakers and its Commission on Higher Education for a number of years, particularly in the context of the state's relatively low educational attainment rate. This, in addition to preliminary state-level discussions of performance-based funding, has helped to make improved retention/graduation one of the university's top priorities.

With the help of a three-year grant from Indianapolis-based pharmaceutical giant Eli Lilly, Ball State is engaging in a bold experiment to improve its retention and graduation. Beginning fall 1997, the university placed all of its non-honors freshmen in learning communities—small groups of students linked by a common interest (commonly arts or an honors curriculum) that study and live together. While the concept of learning communities is not new, BSU is one of the few institutions to apply it so broadly. The university's learning communities are organized around a set of core courses, and students in a community live in close proximity to each other. The communities are served by teaching and learning teams composed of faculty, upper class student mentors, and staff from student service areas such as residence halls.

University leadership expects that the team approach will have a positive effect on teaching and learning by providing an integrated approach to meeting students'

needs and by providing more support to faculty in the instructional process. Early indications are that students are responding positively to the experiment, and that it is especially well received among parents.[14]

Administrative Challenges

Nearly every president or chancellor can relate to having to respond to questions about the effectiveness of their institution in graduating and placing its students (particularly compared with peer institutions). The difficulty associated with giving a response is twofold. Until recently, many public colleges and universities simply did not have the mechanisms in place to adequately track retention, graduation and other student outcomes. Redd and Scott capture this in their account of the National Retention Project:

> *"When NASCU administered the first survey in 1992, it found that only 78 of 188 responding institutions could provide the comprehensive cohort data required to complete the survey. This apparent lack of capacity raised concerns, not only about how well institutions could track students–and thus have an accurate picture of retention problems–but also about how well they could meet new accountability standards, such as those anticipated in the Student Right-to-Know Act reporting requirements to be implemented by the U.S. Department of Education in 1998."*[15]

Second, many current accountability measures, such as those in the Student Right-to-Know Act, fail to account for the diversity of attendance patterns that exist in higher education today. For example, the six-year graduation rate reported under the federal Student Right-to-Know Act does not account for part-time enrollment, which is a growing part of the population to be served. A recent study by Indiana University/Purdue University-Indianapolis (IUPUI) underscores this problem:

> *"Although traditional measures of student retention and graduation rates will not go away, they do not offer a sufficient basis for judging the progress and achievement of most IUPUI students. As we strive to improve rates of student progress, we should employ measures of program effectiveness and student achievement that relate to all students and not just those who enter as first time, full-time students in the fall term."*[16]

As a result, institutions and systems continue to search for the means to provide a comprehensive picture of their student bodies and what ultimately happens to them.

The Joint Commission on Accountability Reporting (JCAR), composed of associations representing two-year and four-year public institutions, was formed to develop comprehensive and comparable reporting measures in areas such as student advancement. By accounting for the different types of course loads taken by students, a more complete picture of graduation and retention can be presented, one that can help identify particular areas of institutional concern (e.g. one-year retention rates for partial load students compared with those for extended load students). Student course loads* are defined by JCAR as follows:

- *Catalog Load Student*–a student who, on average, attempts a course load per term that leads to graduation within the catalog award time for the program of study in which the student is enrolled (e.g. two years for an associate degree and four years for a bachelor's degree).

- *Extended Load Student*–a student who, on average, attempts a course load that leads to graduation within 150 percent of catalog award time (e.g. three years for an associate degree and six years for a bachelor's degree).

*Since student course load often changes during a degree attempt, an average course load is calculated for each student: average course load = total credit units attempted ÷ total elapsed terms of possible enrollment.

- *Partial Load Student*–a student who, on average, attempts a course load per term that is not enough to lead to graduation by the extended award time.

Time-to-graduation benchmarks are classified similarly:

- *Catalog Award Time*–the point in time at which all requirements for a degree or certificate are completed by students at an institution according to catalog convention (e.g. two years for an associate degree and four years for a bachelor's degree).

- *Extended Award Time*–150 percent of catalog award time (e.g. three years for an associate degree and four years for a bachelor's degree).

- *Eventual Award Time*–the point in time at which nearly all (95 percent) of a cohort has graduated or completed (NOTE: In cases where this point has not yet been reached, the rate of completion at a given point beyond extended award time is sometimes substituted).[11]

Table 2 illustrates how this information can be summarized and presented for both two-year and four-year public institutions.

Recognizing that students' careers often span more than one institution, measures of student advancement have been developed to encompass student transfers out of an institution, as well as students still enrolled or gradu-

Table 2. Retention/Graduation Data Using JCAR Conventions

University of Maryland-College Park, Fall 1990 Degree-Seeking Cohort

	Portion of Total Cohort	One-Year Retention Rate	Catalog-Time Graduation Rate	Extended-Time Graduation Rate
All Students	100.0%	84.0%	30.2%	59.7%
Catalog-Load Students	18.5%	95.2%	77.4%	92.2%
Extended-Load Students	59.5%	91.9%	26.4%	69.3%
Partial-Load Students	22.0%	53.5%	1.0%	6.5%

Source: University of Maryland-College Park

Kaua'i Community College, Fall 1991 Cohort

	Portion of Total Cohort	One-Year Retention Rate	Catalog-Time Graduation Rate	Extended-Time Graduation Rate*
All Students	100.0%	74.0%	13.9%	19.4%
Catalog-Load Students	3.9%	83.3%	83.3%	83.3%
Extended-Load Students	16.8%	15.4%	51.9%	65.4%
Partial-Load Students	79.3%	2.0%	2.4%	6.5%

*Spring 1996 defined as eventual time for this cohort

Source: Kaua'i Community College

ating. Again, data prepared by two-year and four-year public institutions demonstrate this in Table 3.

Policymaker interest in student outcomes does not stop at graduation day, however. Legislators and governors increasingly demand information on the retention and employment of graduates in the state where they received their degree. Stories of students with professional degrees working in low-wage retail jobs and concerns over the "brain drain" from states have prompted the development of follow-up tracking systems for recent college graduates, either by institutional initiative or legislative mandate. Florida has led the way in this area, establishing the Florida Education and Training Placement Information Program (FETPIP) in 1984. FETPIP matches information on participants in 75 organizations and programs, ranging from correctional system releases and unemployment insurance claimants to Ph.D. recipients, with records of their current employment or military service status.[15] A number of other states have recently developed similar systems, two of which are described below:

Oklahoma. In response to recent legislative and executive branch requests for information on the retention and job placement of the state's college graduates, the Oklahoma State Regents for Higher Education formed a partnership with the Oklahoma Employment Secu-

Table 3. Student Advancement Data Using JCAR Conventions

Oakton Community College, Fall 1993 Cohort

Entry Status	Degree/ Seeker or Course Taker	Number	Still Enrolled	Graduated	Transferred	Eventual-Time Advancement Rate (Spring 1997)
New	Degree/Certificate	1,343	365	112	283	45.2%
	Course	384	79	16	72	36.7%
Total New		1727	444	128	355	
Transfer	Degree/Certificate	937	124	61	173	30.4%
	Course	725	84	23	119	27.0%
Total Transfer		1662	208	84	292	

Source: Oakton Community College

University of Hawaii-Manoa, Fall 1990 Cohort

	Cohort Size	Catalog-Time	Catalog-Time Advancement Rate	Extended-Time	Extended-Time Advancement Rate
	2,742	2,207	80.0%	2,013	73.0%
Enrolled		1,186		212	
Graduated		886		1,647	
Transferred (est.)		135		154	

Source: University of Hawaii-Manoa

rity Commission (OESC) to provide follow-up data. Using its Unitary Data System, the regents are able to match records on resident students receiving degrees from Oklahoma's public and private colleges with the OESC's unemployment insurance records (an indication of employment in the state), as well as with records in the Oklahoma Tax Commission's database.

The resulting reports show the percentage of Oklahoma residents employed or still enrolled in the state after receiving their bachelor's degree as a gauge of the state's ability to retain graduates *(See Table 4)*. The reports also show the employment of resident bachelor's degree recipients after five years according to their field of study and field of employment as a measure of degree productivity *(See Table 5)*.

The second indicator illustrates one of the system's limitations and exposes an underlying debate regarding educational outcomes and follow-up tracking. The fit between degree fields (reported by the U.S. Department of Education's Classification of Instructional Programs) and employment fields (reported by the Standard Industrial Codes) is at best general, and simply breaks down for certain degrees (particularly in the liberal arts). Some maintain that while this fit is imperfect, measuring the proportion of graduates employed in a field related to their degree is an appropriate gauge of the degree's productivity. Others argue that the definition of "related field" is problematic because of this imperfect fit, and further question whether the "related field" criteria is appropriate as the indicator of a productive college experience.

Table 4. Percentage of Oklahoma Residents Receiving Bachelor's Degrees Employed or Enrolled In-State, August 1997

Degree Field	1991-92	1992-93	1993-94	1994-95	1995-96
Agriculture	65%	71%	62%	66%	68%
Architecture	76%	70%	67%	67%	57%
Biological Science	76%	87%	79%	84%	83%
Business/Management	83%	80%	77%	78%	74%
Communications	77%	85%	77%	82%	78%
Data Information	63%	70%	64%	64%	63%
Education	81%	81%	76%	77%	74%
Engineering	66%	74%	67%	66%	69%
Fine Arts	100%	100%	100%	85%	80%
Foreign Language	82%	79%	72%	74%	77%
Health Professions	76%	76%	68%	74%	70%
Home Economics	80%	78%	66%	74%	70%
English/Literature	75%	79%	71%	78%	83%
Interdisciplinary	88%	85%	81%	90%	90%
Mathematics	74%	78%	72%	66%	73%
Physical Science	71%	75%	74%	76%	84%
Psychology	77%	80%	75%	85%	77%
Public Affairs	71%	76%	71%	67%	67%
Social Sciences	71%	74%	69%	72%	73%
Theology	74%	71%	77%	97%	80%
All Fields	**78%**	**79%**	**74%**	**75%**	**74%**

Source: Oklahoma State Regents for Higher Education

Those issues aside, the system is providing useful information for Oklahoma policymakers. The retention of resident bachelor's degree recipients is significantly higher than expected (74 percent at the one-year point and 78 percent at the five-year point), which may affect the dynamics of the "brain drain" discussion in the state. The data also reveal that of residents still in the state one year after receiving a bachelor's degree, 73 percent were employed, with the remainder still enrolled or not in the workforce; at the five-year mark, the portion of those still in the state and employed rises to 92 percent.[16]

North Dakota. Education officials in North Dakota have been engaged in discussions about gathering follow-up data on postsecondary programs since the late 1980s. In the early 1990s legislators requested information regarding training and degree programs that could not be provided using existing data arrangements. As a result, 14 state entities (including the North Dakota University System) took the initiative and joined in 1994 to create Follow-up Information on North Dakota Education and Training (FINDET).

In addition to providing data on university system graduates, FINDET processes information on a broad range of education and training programs. Agencies and institutions requesting data for state and/or federal reporting requirements supply basic information on those completing degrees or programs to FINDET. Using a

Table 5. Field of Study for 1991-92 Bachelor's Degree Recipients (public and private institutions) Compared to the Standard Industrial Classification of Employment, August 1997

	Field of Employment by Standard Industrial Codes											
Degree Field of Study	Ag.	Mining	Const.	Manu.	Trans.	Trade (Whsle.)	Trade (Retail)	Finance	Services	Govt.	Other/ Unk./ Enrolled	Total
Agriculture	6%	1%	1%	11%	4%	10%	10%	3%	22%	6%	21%	100%
Architecture	4%	1%	7%	5%	0%	3%	9%	3%	56%	1%	9%	100%
Bio. Sciences	3%	0%	1%	5%	3%	3%	7%	3%	50%	9%	13%	100%
Business/Mgmt	0%	4%	1%	8%	3%	8%	11%	8%	42%	3%	4%	100%
Communications	0%	1%	1%	0%	13%	7%	13%	8%	42%	3%	4%	100%
Data Information	1%	1%	1%	9%	3%	5%	7%	5%	42%	6%	13%	100%
Education	0%	1%	0%	2%	1%	1%	3%	1%	70%	3%	5%	100%
Engineering	0%	3%	2%	28%	10%	3%	3%	2%	27%	5%	13%	100%
Fine Arts	0%	1%	0%	3%	4%	4%	11%	4%	56%	3%	8%	100%
Foreign Lang.	0%	0%	0%	2%	8%	0%	17%	5%	63%	2%	3%	100%
Health Prof.	0%	0%	0%	1%	1%	1%	10%	1%	80%	2%	3%	100%
Home Economics	0%	0%	1%	2%	1%	3%	16%	6%	58%	3%	4%	100%
English/Lit.	0%	1%	1%	6%	6%	4%	14%	6%	40%	6%	16%	100%
Interdisciplinary	0%	2%	0%	5%	1%	1%	3%	10%	42%	4%	16%	100%
Mathematics	0%	1%	0%	2%	2%	1%	14%	8%	60%	3%	8%	100%
Physical Science	0%	3%	1%	8%	5%	0%	4%	0%	43%	3%	22%	100%
Psychology	0%	0%	1%	2%	1%	1%	3%	1%	64%	10%	9%	100%
Public Affairs	0%	1%	0%	2%	2%	0%	0%	0%	38%	25%	3%	100%
Social Sciences	0%	0%	1%	3%	4%	1%	11%	3%	43%	15%	9%	100%
Theology	0%	0%	0%	0%	1%	1%	10%	1%	29%	1%	26%	100%
Totals	**0%**	**0%**	**0%**	**6%**	**3%**	**3%**	**19%**	**3%**	**29%**	**10%**	**26%**	**100%**

Source: Oklahoma State Regents for Higher Education

series of linkages to various data systems (North Dakota Job Service, Department of Labor, etc.), FINDET matches the records of program graduates to employment and enrollment records and produces aggregate reports on the employment status and average salary of a particular group. FINDET then returns the original data files to the requesting agency or institution.

The last point is significant in that FINDET has had to address an unexpected element of public opposition related to issues of individual privacy and the "tracking" of graduates. As a result, the system's organizers have gone to great lengths to reassure policymakers and the public that strict information-handling protocols are in place and that FINDET is in compliance with federal law safeguarding the privacy of personally identifiable educational records (Family Educational Rights and Privacy Act of 1974 [FERPA]). To further reduce the possibility of disclosing individual salary or placement information, the North Dakota legislature passed a law in 1997 which exempts FINDET's activities from the state's open records law. The intensity of this concern has been a surprise to FINDET's advocates, and, according to one of its current administrators, has provided some important tips for states contemplating similar ventures:

- Communicate clearly with policymakers and the public about what information will be collected, how it will be used and stored, and what safeguards exist to maintain data integrity and individual privacy.

- Design the system to collect and process the absolute minimum amount of data needed to accomplish its goals.

- Identify potential roadblocks regarding state and federal laws and regulations as part of the planning process, as well as potential remedies for those obstacles.

As in Oklahoma, some of the initial data produced by FINDET have exceeded expectations, particularly the state's retention of its university system graduates. The first longitudinal analysis of data using FINDET is currently underway.[47]

Policy Implications

What do changes in student demographics and institutional efforts to account for these changes have to do with state policy? In short, plenty.

Accountability Reporting

According to AASCU's 1996 State Issues Survey, 35 states indicated that their public colleges and universities submit annual "report cards" to their legislative and executive branches, either individually or as part of a system. Among states using such reports, graduation rate data is featured in 85 percent of them, while other student outcomes data is included in a majority of them (52 percent).[48] These reports, while usually not directly linked to budget decisions, nevertheless provide governors and legislators with an overall picture of institutions that can influence policy and funding priorities.

Performance-Based Funding and Budgeting

A growing number of states are expanding their application of outcomes measures to newly implemented performance-based funding and budgeting systems. Burke and Serban illustrate this in their research on states with performance funding programs. Their survey of 916 state policymakers and higher education leaders in nine states with performance funding found that six of the eight groups represented in the sample (legislators, coordinating agency officers, chairs of system governing boards, system administration officers, campus senior officers, and deans) named retention and graduation rates among their most preferred indicators.[49] This emphasis is evident in the architecture of the programs. Half of the states currently using performance-based funding for their four-year institutions allocate some portion of their performance funds on the basis of student access and progression measures, and nearly all of those states base at least 20 percent of

their total performance-based funding on these measures.

Given this emphasis in states with performance funding, as well as the fact that 17 states see adoption of performance-based programs as "likely" or "highly likely" within the next five years, it is safe to say that measuring and improving both will continue to grow in importance.[20]

Allocation of Additional Faculty

The City University of New York (CUNY) system recently announced a plan to allocate 270 new academic positions throughout the system based in part on institutional graduation rates. Under the initiative, institutions will receive additional teaching slots according to a formula that includes a graduation rate component. Other elements of the formula include progress toward a goal of having 70 percent of all classes taught by full-time faculty members, success in trimming administrative positions and reallocating them to instruction, and demonstrated need in priority areas such as teacher education.[21]

Raising the Stakes

The view of American higher education as a mature industry was presented earlier in this publication in the context of changing funding support. The developments outlined above further indicate the strength of this view, as Levine points out:

> *"Government is shifting the terms of the relationship between higher education and the public. It is now more concerned with the outcomes of higher education—what students learn—than with the processes of colleges—what faculty members teach and the credits and courses that are offered."*[22]

*The two groups not listing these measures as a top preference were governors and chairs of faculty senates.

The continuing evolution of this relationship will likely mean more linkages of student outcomes to performance funding, more linkages to faculty allocation—in short, more questions of who our students are and what is happening to them. The stakes have been raised, and state colleges and universities face a steep learning curve in their efforts to meet these demands.

Endnotes:

[1] U.S. Department of Education, National Center for Education Statistics. *Nontraditional Undergraduates: Trends in Enrollment from 1986 to 1992 and Persistence and Attainment Among 1989-90 Beginning Postsecondary Students*. Washington, DC: National Center for Education Statistics, 1996.

[2] Ibid.

[3] Ibid.

[4] U.S. Department of Education, National Center for Education Statistics. *Integrated Postsecondary Education Data System (IPEDS): Fall Enrollment Surveys, Fall 1991 and Fall 1993*. Washington, DC: National Center for Education Statistics, 1996 (unpublished data).

[5] Webb, Janis. "Academic Support for Non-Traditional Students." *Centre for the Study of Higher Education Research Working Papers*, 95.7. Melbourne, Australia: Centre for the Study of Higher Education, 1995.

[6] *Nontraditional Undergraduates*, op.cit.

[7] U.S. Department of Education, National Center for Education Statistics. *Beginning Postsecondary Students Longitudinal Study: Second Follow-up*. Washington, DC: National Center for Education Statistics, 1996 (unpublished data produced using Data Analysis System).

[8] Scott, Joyce and Kenneth Redd. "AASCU-Sallie Mae National Retention Project" in *Policies and Practices: A Focus on Higher Education Retention*. Washington, DC: American Association of State Colleges and Universities, 1997.

[9] William Woods U. Graduates to Get Tuition Increase Rebates." *The Chronicle of Higher Education*, 19 September 1997, A44.

[10] Correspondence with Dr. Maribeth Ehasz, University of Central Florida, 7 October 1997.

[11] Interview with Dr. Tom Lowe, Ball State University, 25 September 1997.

[12] Scott and Redd, op. cit.

[13] Indiana University-Purdue University Indianapolis, Office of Information Management and Institutional Research. "IUPUI Undergraduate Student Retention and Graduation Rates." *IUPUI Research Brief*, May 1997.

[14] Joint Commission on Accountability Reporting (JCAR). *IPEDS Technical Conventions Manual*. Washington, DC: American Association of State Colleges and Universities, 1996.

[15] Ibid.

[1] Hagy, Joseph and Leon Gurst. "The General Degree Productivity and Retention of Oklahoma Graduates." Oklahoma State Regents for Higher Education, unpublished paper, October 1997.

[2] Correspondence and interview with Mark Bachmeier, FTXDECT, October 1997.

[3] American Association of State Colleges and Universities. "Ranking the Issues." *MEMO to the President*, November 1996.

[4] Serban, Ambreen. "Performance Funding for Public Higher Education: Views of Critical Stakeholders," in *Performance Funding and Budgeting for Public Higher Education: Current Status and Future Prospects*. Albany, NY: Nelson A. Rockefeller Institute of Government, 1997.

[5] "State Performance Funding and Budgeting for Public Higher Education: Current Status and Future Prospects" in ibid.

[6] Selingo, Jeffrey. "CUNY Board Approves Plan Tying Creation of Faculty Posts to Graduation Rates." *The Chronicle of Higher Education*, 29 October 1997, Internet posting.

[7] Levine, Arthur. "Higher Education's Status as a Mature Industry." *The Chronicle of Higher Education*, 31 January 1997, A48.

Internet Resources

State Funding Support-Have the Rules Changed?

- National Association of State Budget Officers (NASBO)
  http://www.nasbo.org
- National Conference of State Legislatures (NCSL)
  http://www.ncsl.org
- Nelson A. Rockefeller Institute of Government–performance funding information
  http://www.rockinst.org
- State Higher Education Executive Officers (SHEEO)–performance funding information
  http://www.sheeo.org
- Grapevine (Illinois State University)–state higher education appropriations data
  http://www.coe.ilstu.edu/grapevine
- AASCU–special report on state fiscal conditions
  http://www.aascu.nche.edu/resource/research/special/statefis.htm
- Portland State University
  http://www.pdx.edu
- Clayton College and State University
  http://www.csc.peachnet.edu

College Costs-What Are the Real Issues?

- American Council on Education–information on the National Commission on the Cost of Higher Education
  http://www.acenet.edu
- AASCU–special report on student charges
  http://www.aascu.nche.edu/resource/research/ special/studchrg.htm

Who Are Our Students? What Is Happening to Them? What Does It Matter?

- National Center for Education Statistics–nontraditional undergraduate students
  http://www.ed.gov/pubs/97578.html
- AASCU–Joint Commission on Accountability Reporting
  http://www.aascu.nche.edu/services/gov_rel/ jcar.htm
- Ball State University
  http://www.bsu.edu
- University of Central Florida
  http://www.ucf.edu
- Florida Education and Training Placement Information Program (FETPIP)
  http://www.firn.edu/doe/fetpip

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